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ABSTRACT

This brief report summarizes the analysis and conclusions presented in detail in Interim Report VI regarding the feasibility of conducting a longitudinal study of Project Developmental Continuity (PDC). This project is a Head Start demonstration program aimed at providing educational and developmental continuity between children's Head Start and primary school experiences. The analyses were carried out on information collected primarily during Fall 1966, and focused on the reliability and validity of the measures, the potential comparability of PDC and comparison groups, and the adequacy of PDC and comparison sample size. (Author/CM)

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Executive Summary: Recommendations for Continuing The Impact Study

Interim Report VI

April 1977

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A PROCESS EVALUATION OF PROJECT DEVELOPMENTAL CONTINUITY, INTERIM REPORT VI: EXECUTIVE SUMMARY

Recommendations for Continuing the Impact Study

April 1977

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Acknowledgments

The present volume summarizes our assessment of the feasibility of conducting a longitudinal study of Project Developmental Continuity. The complete Interim Report VI is a culmination of two years of data collection, analysis, and discussions on the measurement of PDC's impact on the social competence of Head Start children. We want to acknowledge the contributions of the many persons and groups who have been part of our evaluation since it began in November 1974.

To our government project officer, Esther Kresh, we owe a special debt of gratitude. Her support, guidance and advice on key issues and her continuing encouragement and cooperation have formed a mainstay for our evaluation effort.

To national OCD program staff, including Ray Collins, Jenny Klein, Juanita Dennis, Laura Dittmann, Soledad Arenas, Judy Ramirez and Georgianna McGuire, we extend our thanks for clarifying program goals and expanding our knowledge base of PDC activities.

To the OCD regional representatives, grantee staff, and to the PDC coordinators, parents, teachers, administrators, community representatives, and children at every PDC site across the nation, who have given their time and talents to shape the PDC program, we can only express our gratitude. Without the commitment and contribution of each of these individuals there would, of course, be no PDC program to evaluate. Without exception, their cooperation with the demands of the evaluation has been very gratifying.

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INTRODUCTION

Overview of Project Developmental Continuity (PDC)

The Office of Child Development originated Project Developmental Continuity (PDC) in 1974 as a Head Start demonstration program "aimed at promoting greater continuity of education and comprehensive child development services for children as they make the transitio.. from preschool to school". The single most important effect of this undertaking, it is hoped, will be to enhance the social competence of the children served--that is, to increase their everyday effectiveness in dealing with their environment (at school, at home, in the community, and in society). PDC also aims to bring about broader and more intensive involvement of parents and teachers in the governance of school affairs, and to promote positive change in the institutional process, even beyond the people who may occupy the institution at a given time.

As part of the overall Head Start improvement and innovation effort, PDC emphasizes the involvement of administrators, classroom staff, and parents in formulating educational goals and developing a comprehensive curriculum. The object is to ensure that children receive continuous individualized attention as they progress from Head Start through the early primary grades. If the program is successful, existing discontinuities between Head Start and elementary school experiences will be reduced by PDC mechanisms that encourage communication and mutual decision-making among preschool and elementary school teachers, administrators, and parents.

School organizations at 15 sites around the country received OCD funding during 1974-75 to design and plan implementation of seven prescribed components:

- Administration: administrative coordination between and within Head Start and elementary school;
- Education: coordination of curriculum approaches and educational goals;
- Training: preservice and inservice teacher, staff and parent training in program-related areas;

- Developmental support services: comprehensive services (medical, nutritional, and social) to children and families;

- Parent involvement: parent participation in policy-making, home-school activities, and classroom visits or volunteering;

- Services for the handicapped: services for handicapped children and children with learning disabilities;

- Bilingual/bicultural and multicultural education: programs for bilingual/bicultural or multicultural children.

During Year II, 1975-76, 14 sites (one had withdrawn voluntarily), comprising a total of 42 Head Start centers and elementary schools, began their "start-up" year, pilot testing their adaptations of the PDC program. In 1976-77 PDC is supposed to exist in mature form at the 13 sites that were refunded for Year III. If a longitudinal study of PDC is commissioned, the program's effects will be examined throughout the period beginning with the present year and continuing until the end of the 1980-81 school year. During this period children in the current testing samples (Cohort 2) will progress from Head Start through grade 3.

Purposes of the PDC Evaluation

The major purpose of the PDC evaluation is to aid the Office of Child Development in its efforts to design effective programs for early childhood education. To accomplish this, the evaluation will ultimately have to assess PDC's impact in four areas: children's social competence, parent participation and attitudes, teacher attitudes and work styles and the organizational climates of the schools.

In addition to describing the consequences of PDC, the evaluation will describe and analyze the processes that led to those consequences.[1] It is important to emphasize here that the aims of the total evaluation are to produce conclusions about what happened (impact) and how and why it happened (process). This information will facilitate future decisions about whether the program should be replicated, and if so, how replication can best be accomplished in the light of past experience.

Purpose of this Report

This report summarizes the analyses and conclusions of Interim Report VI. The analyses were carried out on information collected primarily

[1]Volume 2 of Interim Report IV (August 1976) describes the plans and procedures of the Implementation Study.

during the fall of 1976 on children who entered PDC or comparison Head Start programs, and were directed toward answering three critical questions related to assessing impact on children:

1. Are the measuring instruments appropriate to the task?

2. Are the PDC and comparison groups really comparable?

3. Will large enough PDC and comparison samples remain to permit a longitudinal study?

Preliminary information related to these three questions was gathered in 1975-76. On the basis of answers gained that year, some instruments were eliminated from the battery and others were modified; recommendations were made for Head Start enrollment procedures in order to balance PDC and comparison groups in certain important respects; and it was decided that the samples would probably remain large enough over a five-year term to permit group comparisons, but that attrition should be re-assessed in 1976-77.[1]

In this report, the fall 1976 findings are integrated with previous findings and their implications for a longitudinal study of PDC's impact are considered. The discussion concludes with recommendations for the future of the evaluation.

[1]These conclusions are documented and discussed in Interim Report IV, Volume I, Pilot Year Impact Study: Instrument Characteristics and Attrition Trends, August 1976.

II

METHODS

Measures

The measures on which this report focuses are tests of cognitive and language development, psychomotor development, and social-emotional behavior (see list in Table 3).[1] Additional data on the program's impact on children are obtained through teacher and tester ratings of children's behavior and a classroom observation system.

Data Collection

Testing, observations and ratings were completed in fall 1976 by 36 testers/observers hired from each of the PDC communities and trained by High/Scope staff. Standard procedures for checking accuracy of testing procedures and quality of the data were followed.[2]

Data collection began in mid-September and was completed within nine or ten weeks at each site. Across the 12 sites, 1,219 children were tested and rated, and observations were completed in 80 classrooms. The compositions of the samples in terms of demographic characteristics are presented by site in Table 1.

Data Analysis

The data analyses proceeded through a sequence of six steps which focused first on the characteristics of the instruments and then on the characteristics of the samples. These steps provided information on the following:

- reliability of the instruments,
- validity of the instruments,
- cross-time and cross-sample congruence of reliability and validity findings (examination of fall 1976 data in relation to data from fall 1975 and spring 1976),

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[1]The rationale for selecting these measures is documented in Interim Report II: Recommendations for measuring program impact, June 1975.

[2]These procedures are described fully in Interim Report VI and in the Field Procedures Manual prepared for the High/Scope field staff.

- factor structure of the battery,
- comparability of PDC and comparison samples,
- adequacy of present sample sizes in view of projected attrition.

III

FINDINGS

The three questions addressed in this report are particularly critical as the PDC evaluation begins what could become a five-year longitudinal study of the benefits that result from children's participation in Developmental Continuity programs from Head Start through third grade. In this section key findings relating to the three questions are summarized following a brief discussion of the importance of each question.

Are the Measuring Instruments Appropriate to the Task?

Since an important goal of PDC is to enhance the social competence of children, it is essential that the instruments used yield measures that, collectively, represent social competence in an accurate and meaningful way. Six criteria have been used for judging the adequacy of the instruments: reliability (internal consistency), validity (congruence with expectations), sensitivity to change over time, apparent relevance to social competence, suitability for use in higher grades, and ease of administration.

Reliability. Table 2 summarizes the reliability findings for the tests. The internal consistency reliability coefficient was .65 or greater for all measures in both the English- and Spanish-dominant samples. Most measures have remained constant in their reliability indices across the three timepoints at which they have been administered during this evaluation. Changes in scoring have increased the reliability of two measures, but the reliability of another measure has declined slightly.

Validity. The validation procedures involved determining the expected relationship of each measure with each of the others, then comparing these expectations with the relationships that actually appeared in the data. Under this convergent-discriminate method of assessing validity, the assumption is made that if an instrument is actually measuring the construct it is intended to measure, the results will correlate highly with other measures of the same general construct, will correlate moderately with measures of similar constructs, and will not correlate at all with measures of independent constructs. All the instruments examined are acceptably valid for Head Start children, as evidenced by the stability of their validity indices across two cohorts and three timepoints.

Sensitivity to change. Since the Impact Study depends upon the PDC battery of measures to detect changes that can be attributed to program differences, three types of analyses based on the pilot samples' fall 1975 and spring 1976 data were carried out:

- The correlation of each measure in the fall and in the spring with child age at the time of testing was calculated to determine the age-relatedness of the measures; the correlations tended to be low, positive, and significant, with coefficients generaliy between .15 and .30.

- The difference between the fall mean score and the spring mean score on each measure was analyzed to ascertain if the scores increased significantly from fall to spring; all measures except the Bilingual Syntax Measure-English showed a significant fall-to-spring increase.

- A regression procedure was used to determine whether the observed spring mean on a measure was equal to or greater than the expected, or predicted, spring mean; more than half of the children obtained an actual spring score equal to or greater than their expected spring score indicating that the tests are sensitive to change due to educational experience as well as to experience that is simply a function of increased age.

Relevance to social competence. Since the PDC battery was constituted with the intent of measuring the traits that comprise social competence, an analysis was performed for the August 1976 Impact Study report that examined the relationship of spring 1976 test scores to ad hoc criteria of social competence. The criteria were established by factor analyzing ratings completed by each child's teacher and tester, and then creating factor scores for each child that represented his or her status on each of the "social competence" factors. The assessments provided by the teachers and testers are based upon observations of each child's behavior in a variety of formal and informal situations, and thus logically come close to representing measures of the child's "everyday effectiveness", i.e., social competence.

The object of the analysis (a linear regression procedure) was to determine the magnitude of the relationship existing between the tests included in the PDC battery and the "social competence" criteria. The more relevant the tests are to social competence, the stronger the relationship expected. All tests except Arm Coordination were found to be substantially associated with the collective "social competence" criteria. Thus, these tests, originally selected for their theoretical relevance to social competence, seem to provide measures that are empirically relevant to social competence as well.

Suitability for use in the higher grades. During the 1975-76 testing periods, approximately 25 children per grade (kindergarten through grade 3) were tested at the Georgia site as part of the cross-sectional design there. In addition, 30 third graders were tested in Maryland.

Conclusions about the suitability of the child measures for use at each of these grades were based on four factors: response distributions on the items of each measure, mean scores on each measure, reliability (internal consistency), and validity. Based on these factors, all of the measures appear to be useful through grade 3, either in their present forms or with modifications.

Ease of administration. One of the factors taken into consideration when tests were being reviewed for the PDC Impact Study was their general suitability for administration by a paraprofessional. In general, monitoring of testers during training and data collection indicates that the tests have not been difficult to administer. Tester performance improves with practice and administration difficulties are more apparent with new testers than with experienced ones.

Are the PDC and Comparison Groups Really Comparable?

The effects of PDC upon children will be determined primarily by comparing the performance of children in PDC testing samples with the performance of children who are similar, but who do not participate in PDC (i.e., a comparison group). The assumption implicit in this comparison is that the children in the two groups would remain parallel were it not for the intervention of PDC, and thus the way children in the comparison group perform in the future stands for the way PDC children would have performed without the presumed advantage of PDC. Whether this assumption itself stands or falls depends upon the initial equivalence of the two groups. Unless they are very similar to begin with, or can legitimately be equalized by statistical means, no sensible comparison can be made.

For each site and for each variable appearing in Table 3, the assumption of PDC-comparison group equality was tested statistically (using the chi-square technique for categorical variables and t tests for metric variables). All available data entered into each analysis, meaning that even if data were missing for a particular child on one or more variables, data obtained for that child on other variables did enter into the respective analyses. A difference was declared to exist between PDC and comparison groups if analysis indicated the chance probability of the observed difference to be less than one in 100 ($p<.01$). These analyses show that:

- At the individual site level the groups appear similar; there are differences on background variables in only one site. On performance measures, of the 13 comparisons made (the Spanish and English samples in California and Texas were tested separately in these analyses), ten showed either no group differences or differences only on the POCL or Height and Weight; only two sites had group differences on more than one child measure.

- At the aggregate level the similarities of the groups are more prominent than their differences. In the English-dominant sample, there are no significant group differences on the background variables and only one difference in test performance. In the Spanish-dominant sample, the groups differed on only one background variable, and there was no difference on any of the performance measures.

Will Large Enough PDC and Comparison Samples Remain to Permit a Longitudinal Study?

In addition to the requirement of comparability, it is important that the PDC and comparison testing samples remain large enough as time passes to permit continuing analyses of their relative performance. Attrition will inevitably occur, and the smaller the groups become, the more difficult it will be to separate PDC's effects from the effects of the many other factors that contribute to the performance of the children.

The first column of Table 4 shows, for each site and for all sites collectively, the number of children that were available for fall 1976 testing at PDC and comparison Head Start centers. These children constitute the full sample of Cohort 2, the cohort whose progress will be followed through grade 3. On the average, these groups are about 9% smaller than the sites had estimated they would be. Moreover, the mean retention rate determined this fall for Cohort 1 children (Cohort 2's pilot-year predecessors, now in kindergarten) is lower than was anticipated.

The number of PDC and comparison children who will actually be available for testing in the future is likely to be lower than these projections, for a number of reasons. First, the figures represent children in the full sample. Consideration of handicap and language factors would require the elimination of some children from the analytic sample, which is the source of the data used for statistical analysis. About 11% of the full sample were excluded from the analytic sample for reasons of handicap or language.

Taking these factors into consideration, the number of PDC and comparison children from Cohort 2 who are likely to remain in the analytic sample of English-dominant children through grade 3 can be estimated at about 375 (205 PDC children, 170 comparison children). The number of children likely to remain in the Spanish-dominant sample is about 40 (20 PDC, 20 comparison children).

IV

CONCLUSIONS

The findings presented in Interim Report VI and reviewed here support the following answers to the three questions posed for this phase of the evaluation.

Are the Measuring Instruments Appropriate to the Task?

YES, it can be said with few reservations that all of the instruments included in the battery satisfy all the criteria that have been used in judging them (see Table 5). In addition, although the factor structure of the battery does not correspond exactly to the a priori categorization of the tests (cognitive-language, social-emotional, psychomotor), the factors that emerge are similar to those expected for both the English-dominant and Spanish-dominant groups, and indicate that the battery does provide coverage of these areas. In addition, the observation system appears acceptable as a means of assessing the classroom environment.

Are the PDC and Comparison Groups Really Comparable?

YES, at the site level, Cohort 2 PDC and comparison groups seem to be more similar than were Cohort 1 groups. The comparability of the aggregated English- and Spanish-dominant PDC and comparison groups seems quite satisfactory for analytic purposes. In future analyses of test score gain, the variables on which the groups differ initially can be adjusted without difficulty to make allowances for initial status.

Will Large Enough Samples Remain for a Longitudinal Study?

YES, by aggregating PDC and comparison groups across sites, a sufficient sample can be constituted to allow analyses to continue through 1980-81, when Cohort 2 will be in grade 3. This is certainly true for the English-dominant sample, at least; it is less certainly true for the Spanish-dominant sample. However, even for the latter, analyses could proceed for a few years--long enough to allow preliminary conclusions to be drawn about the effects of PDC. It is obvious from attrition

projections, however, that if the evaluation depended upon site-level analyses of PDC's effects on children, the sample sizes available at most sites would be inadequate by the time Cohort 2 reaches first grade.

Summary

The preliminary phase of the PDC evaluation has achieved its primary objective of determining the feasibility of a longitudinal study: suitable measures have been selected, adapted, tried out, modified and analyzed; comparison groups have been located at each site that are well-matched to the PDC groups; and PDC sites have been successful in recruiting enough children for the PDC and comparison groups to permit, at least in the aggregates, a study of PDC's effects on the children's progress through third grade.

Table 1

Composition of the Samples, Fall 1976

		Number in Full Sample	% Handicapped	ETHNICITY					SEX		DOMINANT LANGUAGE			Number in Final Analytic Sample
				% Black	% Hispanic	% American Indian/ Native Alaskan	% White	% Asian/Pacific Islander	% Male	% Female	% English	% Spanish	% Other	
CALIFORNIA-English	PDC	37	0	3	87	0	11	0	19	81	86	11	3	37
	Comp	25	0	4	63	0	33	0	38	62	96	4	0	24
CALIFORNIA-Spanish	PDC	7	0	0	100	0	0	0	43	57	43	57	0	7
	Comp	15	0	0	100	0	0	0	40	60	0	100	0	15
COLORADO	PDC	55	7	7	75	0	18	0	49	51	100	0	0	51
	Comp	32	6	6	69	0	25	0	56	44	100	0	0	30
CONNECTICUT	PDC	56	11	46	39	2	13	0	59	41	61	36	4	37
	Comp	57	0	84	9	0	7	0	51	49	93	5	2	55
GEORGIA	PDC	46	7	65	0	0	35	0	50	50	100	0	0	43
FLORIDA	PDC	47	4	100	0	0	0	0	64	36	100	0	0	45
	Comp	39	0	87	10	0	3	0	47	53	90	10	0	39
IOWA	PDC	50	2	50	2	0	46	2	50	50	98	0	2	49
	Comp	54	6	24	2	2	70	2	52	48	100	0	0	51
MARYLAND	PDC	44	30	46	9	2	39	5	48	52	94	0	6	31
	Comp	58	22	36	24	0	29	10	52	48	64	17	18	45
MICHIGAN	PDC	66	12	59	5	0	36	0	58	42	100	0	0	58
	Comp	64	9	75	3	0	22	0	45	55	100	0	0	58
TEXAS-English	PDC	26	0	4	31	0	65	0	46	54	100	0	0	26
	Comp	20	5	0	75	0	25	0	50	50	95	5	0	19
TEXAS-Spanish	PDC	38	0	0	100	0	0	0	65	35	92	8	0	38
	Comp	37	8	0	97	0	3	0	41	60	100	0	0	34
UTAH	PDC	68	10	3	15	2	79	2	56	44	99	0	2	61
	Comp	61	10	5	18	8	68	0	49	51	97	2	2	55
WASHINGTON	PDC	58	16	26	0	14	48	12	53	47	97	0	4	49
	Comp	76	13	43	3	5	46	3	42	58	99	0	1	66
WEST VIRGINIA	PDC	46	9	9	0	0	91	0	56	44	100	0	0	42
	Comp	37	22	14	0	0	87	0	38	62	100	0	0	29
TOTALS BY GROUP	PDC	644	9	33	26	2	37	2	53	47	88	11	1	575
	Comp	575	9	36	25	2	36	1	47	53	86	12	2	520
TOTALS, ALL GROUPS COMBINED		1219	9	35	25	2	36	2	50	50	87	11	2	1095

Table 2

Reliability of the Child Measures:[a]
Cronbach's Alpha (Internal Consistency)
for Fall 1976 Head Start Children

Measures	Cronbach's Alpha			
	English-Dominant Children		Spanish-Dominant Children	
	n	r_α	n	r_α
COGNITIVE-LANGUAGE				
Bilingual Syntax Measure-English	997	.84	39	.93
Bilingual Syntax Measure-Spanish[b]	16	.95	89	.86
Block Design (WPPSI)	999	.77	94	.82
Verbal Fluency (MSCA)	975	.76	92	.81
Verbal Memory-1 (MSCA)	997	.85	94	.89
Verbal Memory-2 (MSCA)	989	.82	93	.84
Draw-A-Child (MSCA)	978	.84	92	.78
PSYCHOMOTOR				
Arm Coordination (MSCA)	976	.65	89	.73
SOCIAL-EMOTIONAL				
POCL-Total (High/Scope)	1001	.95	94	.97
POCL-1 (High/Scope)	1001	.95	94	.96
POCL-2 (High/Scope)	1001	.90	94	.96

[a] Two instruments are not included: the scoring of the Preschool Interpersonal Problem Solving Test does not lend itself to computing alpha, and the reliability of the classroom observation system was determined differently.

[b] Texas and California only (Bilingual/Bicultural Demonstration Sites).

Table 3

Comparability of PDC and Comparison Groups at Each Site and for Samples Aggregated Across Sites, Fall 1976 ($p < .01$)

Key:

* = statistically significant group difference ($p<.01$)
✓ = no significant difference between groups
? = data insufficient for analysis
\- = test not appropriate

		SITE:																	
		CALIFORNIA-English	CALIFORNIA-Spanish	COLORADO	CONNECTICUT	GEORGIA	FLORIDA	IOWA	MARYLAND	MICHIGAN	TEXAS-English	TEXAS-Spanish	UTAH	WASHINGTON	WEST VIRGINIA	ENGLISH AGGREGATE	SPANISH AGGREGATE	ENGLISH AGGREGATE without Georgia
N for analytic sample	PDC	37	7	51	37	43	45	49	31	58	26	38	61	49	42	530	45	487
	Comp.	24	15	30	55	--	39	51	45	58	19	34	55	66	29	471	49	471
BACKGROUND CHARACTERISTICS																		
Ethnicity		✓	✓	✓	✓	No Comparisons Possible	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sex		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Age		✓	✓	✓	✓		✓	✓	✓	✓	✓	*	✓	✓	✓	✓	*	✓
Prior Preschool Experience		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Number of Siblings		?	?	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mother's Education		?	?	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TEST PERFORMANCE																		
Cognitive-Language Measures																		
BSM-English		✓	?	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	?	✓
BSM-Spanish		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Block Design (WPPSI)		✓	✓	✓	✓		✓	*	✓	*	✓	✓	✓	✓	✓	*	✓	✓
Verbal Fluency		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Verbal Memory-1		✓	✓	✓	✓		✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Verbal Memory-3		✓	✓	✓	✓		✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓	✓
Draw-A-Child		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Psychomotor Measure																		
Arm Coordination		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Social-Emotional Measures																		
PIPS-Solutions		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
POCL-Total		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
POCL-1		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
POCL-2		✓	✓	✓	✓		*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Health-Nutrition Measures																		
Height		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	*	✓	✓	✓	✓	✓
Weight		✓	✓	✓	✓		✓	✓	✓	*	✓	✓	✓	✓	✓	✓	✓	✓

Table 4

Projected Retention of Cohort 2 Children for Each Year of the Prospective Longitudinal Study

		1976-77 Head Start		1977-78 K		1978-79 1		1979-80 2		1980-81 3	
		%	*N*	%	*N*	%	*N*	%	*N*	%	*N*
California	PDC	100	*44*	70	*31*	59	*26*	54	*24*	44	*19*
	Comp	100	*40*	42	*17*	35	*14*	32	*13*	26	*10*
Colorado	PDC	100	*55*	49	*27*	41	*23*	38	*21*	31	*17*
	Comp	100	*32*	42	*13*	35	*11*	32	*10*	26	*8*
Connecticut	PDC	100	*56*	50	*28*	42	*24*	39	*22*	32	*18*
	Comp	100	*57*	42	*24*	35	*20*	32	*18*	26	*15*
Florida	PDC	100	*47*	31	*15*	26	*12*	24	*11*	20	*9*
	Comp	100	*39*	65	*25*	55	*21*	50	*20*	41	*16*
Georgia	PDC	100	*46*	77	*35*	65	*30*	59	*27*	49	*23*
Iowa	PDC	100	*50*	51	*26*	43	*22*	39	*20*	32	*16*
	Comp	100	*54*	38	*21*	32	*17*	29	*16*	24	*13*
Maryland	PDC	100	*44*	73	*32*	61	*29*	56	*25*	46	*20*
	Comp	100	*58*	77	*45*	65	*38*	59	*34*	49	*28*
Michigan	PDC	100	*66*	86	*57*	72	*48*	66	*44*	54	*36*
	Comp	100	*64*	69	*44*	58	*37*	53	*34*	43	*28*
Texas	PDC	100	*64*	84	*54*	71	*45*	65	*42*	53	*34*
	Comp	100	*57*	76	*43*	64	*36*	59	*34*	48	*27*
Utah	PDC	100	*68*	62	*42*	52	*35*	48	*33*	39	*27*
	Comp	100	*61*	36	*22*	30	*18*	28	*17*	23	*14*
Washington	PDC	100	*58*	62	*36*	52	*30*	48	*28*	39	*23*
	Comp	100	*76*	70	*53*	59	*45*	54	*41*	44	*33*
West Virginia	PDC	100	*46*	55	*25*	46	*21*	42	*19*	35	*16*
	Comp	100	*37*	73	*27*	61	*23*	56	*21*	46	*17*
AGGREGATE	PDC	100	*644*	63	*408*	54	*345*	49	*316*	40	*258*
	Comp	100	*575*	58	*334*	49	*280*	45	*258*	36	*209*

NOTE: "%" represents proportion of original group remaining, "*N*" represents size of group remaining. In the 1976-77 column, *N* = original sample size and % = 100, necessarily. The figures in successive columns are projections based on the actual 1976-77 figures.

Table 5

Summary of Findings on Characteristics of Measures Included in the Fall 1976 Battery

	Internal Consistency	Validity	Sensitivity to Change[a]	Relevance to Social Competence[a]	Developmental Span[a]	Ease of Administration
BSM-English	✓	✓	(✓)	✓	-	✓
BSM-Spanish	✓	✓	(✓)	-	-	✓
Block Design (WPPSI)	✓	✓	-	-	-	✓
Verbal Fluency	✓	✓	✓	✓	✓	✓
Verbal Memory-1	✓	✓	✓	✓	(✓)	✓
Verbal Memory-3	✓	✓	✓	✓	✓	✓
Arm Coordination	✓	✓	✓	✓	✓	✓
Draw-A-Child	✓	✓	✓	✓	(✓)	✓
PIPS	-	✓	✓	✓	✓	✓
POCL	✓	✓	-	-	✓	✓

✓ = Acceptable

(✓) = Provisionally acceptable

- = Not examined

[a]Determined in earlier analyses of spring 1976 data.